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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,623	03/21/2000	KLAUS-LEO WILBUER	SWR-0004	2649

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EXAMINER

CHAMBERS, TROY

ART UNIT	PAPER NUMBER
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3641

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/446,623	WILBUER ET AL.	
	Examiner	Art Unit	
	Troy Chambers	3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10, 12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION*****Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-10, 12 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, claims 1 and 13 recite the limitation, "at least intermittently" when describing the time period for the relative movement between the surface to be coated and the dispersion bath. However, the specification as filed does not provide support for this limitation. Webster's defines intermittent as "not continuous". The phrase "at least intermittently" not only includes a relative movement that is not continuous but one that is continuous as well. Applicant's specification, as originally filed did not provide support for a continuous mixing process.

4. Claims 1-10, 12 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use

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the invention. Specifically, claims 1 and 13 recite the limitation, "at least intermittently" when describing the time period for the relative movement between the surface to be coated and the dispersion bath. The phrase "at least intermittently" not only includes a relative movement that is not continuous but one that is continuous as well. However, the specification does not disclose to one of ordinary skill the art a relative movement that is. The following references to the specification are the only locations which give an indication as to the frequency of the relative movement:

- Pg. 2, 2<sup>nd</sup> paragraph, " and during the coating process a relative movement is produced between the surface to be coated and the dispersion bath, *at least for a time.*" (emphasis added). "At least for a time" is undefined since time can be infinitesimal or infinite.
- Pg. 4, last paragraph, "The plates were all turned every half hour in the bath and *moved up and down form time to time* in order to produce a relative movement between the surface and the dispersion bath..." (emphasis added).

These references suggest a relative movement that is, at best, performed occasionally and not on a continuously.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claim 13 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Baburek. Baburek discloses a shielding element having a boron carbide content of 50 wt. % in the nickel matrix (pg. 9, ll. 1-5). If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over EPO Publication EP 55679 issued to Baburek in view of U.S. Patent No. 4238299 issued to Wang. Baburek discloses a boron-nickel shielding element. However, Baburek does not disclose the relative movement claimed by the applicant. Wang discloses a dispersion bath manufacturing process for nuclear radiation shields including a relative movement provided at least intermittently (col. 4, ll. 12-68 and col. 5, ll. 4-32).

2. With respect to claims 1 and 13, it would have been obvious to one having ordinary skill in the art to manufacture the boron-nickel shielding element of Baburek

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using the process disclosed by Wang. The suggestion/motivation for doing so would have been to achieve an even distribution of boron particles.

3. With respect to claim 2, see Wang, col. 4, ll. 48-59.
4. With respect to claim 3, see Wang, col. 4, ll. 12-17 and Figs. 1, 6 and 7.
5. With respect to claim 4, see Wang, col. 3, ll. 19-22 and col. 4, ll. 45-46.
6. With respect to claim 5, one having ordinary skill in the art would find it obvious to remove the carbon element from the boron carbon compound. Removing the carbon element would eliminate the abrasive properties of the boron carbon compound but would physically allow more boron to be embedded in another metal as a result of the increase in molecular spacing.
7. With respect to claim 6, Baburek discloses a method for coating a shielding element with a boron-nickel layer using a plasma torch (Abst.).
8. With respect to claim 7, Wang discloses electrolytic boron carbide deposition (Abst.).
9. With respect to claim 8, the thickness of the coating is controlled by the quantity of coating material used and, therefore, involves only routine skill in the art. One of ordinary skill in the art using the process of Wang to manufacture the shielding of Baburek would find it obvious to provide a sufficient quantity of coating material to achieve the properties of a shielding element having the claimed thickness.
10. With respect to claims 9 and 10 Baburek discloses a boron carbide content of 50 wt. % (pg. 9, ll. 1-5).
11. With respect to claim 12, see Wang, col. 2, ll. 58-61.

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**Conclusion**

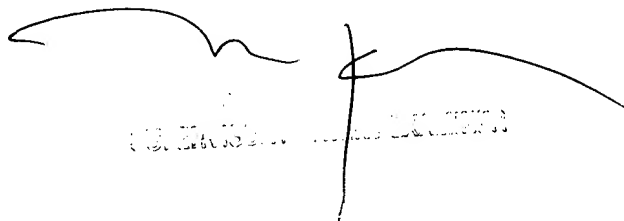
7. This is an RCE of applicant's earlier Application No. 09/446623. All claims are drawn to the same invention claimed in the earlier application (applicant's claims 1-3 were amended to satisfy 112(2) rejections in previous Final office action but are essentially the same) and could have been finally rejected on the grounds and art of record (no new prior art used in this action) in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Troy Chambers whose telephone number is (703) 308-5870. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone, can be reached at (703) 306-4198.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-4177. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-4195.



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